

REMARKS

Claims 5-17 are all the claims presently pending in the application. Claims 7-17 have been added to claim additional features of the invention.

It is noted that the claim amendments are made only for more particularly pointing out the invention, and not for distinguishing the invention over the prior art, narrowing the claims or for any statutory requirements of patentability. Further, Applicant specifically states that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Relative to new claim 15, this claim is written in means-plus-function so that the prior art evaluation must consider the structure for the means, as described in the specification, with rejection based on the same structure or its reasonable equivalent.

Relative to new independent claim 11, support is found at lines 14-19 of page 9 of the specification. Support for new claims 9 and 14 is found in the description for Figures 7 and 8.

Claims 5-6 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Soichi (JP 09-015560).

This rejection is respectfully traversed in the following discussion.

I. THE CLAIMED INVENTION

As described, for example, by claim 5, the claimed invention is directed to a liquid crystal display device. Pixels equipped with a liquid crystal cell and a switch element are

arranged at positions where scan lines and data lines intersect. A data line drive circuit supplies from the data line and the switch element to the liquid crystal cell a write signal corresponding with image data.

A control circuit inverts a polarity of the write signal after every plurality of scan lines. A scan line drive circuit supplies a drive signal to the scan lines for switching the switch elements ON and OFF. The scan line drive circuit and the data line drive circuit, in the scan lines where the polarity of said write signal is inverted, supply the drive signal and the write signal for a period of time that is longer than one horizontal period by a fixed amount of time that is determined within a range of an invalid period, during which the invalid period the image data is not supplied, and in the following scan lines to which is supplied a write signal of the same polarity as the scan line, supply the drive signal and the write signal for a period of time shorter than one horizontal period by the fixed amount of time.

This feature provides a liquid crystal display having low power consumption and in which horizontal stripes are prevented from occurring without the circuitry becoming more complex.

II. THE PRIOR ART REJECTION

The Examiner alleges that Soiche teaches the claimed invention described by claims 5 and 6. Applicant submits, however, that there are elements of the claimed invention which are neither taught nor suggested by Soiche.

The Examiner alleges that lines 8-13 of the CONSTITUTION on the English Abstract page teaches the final limitation of claim 5. Applicants respectfully disagree,

since, although these lines reasonably describe a longer horizontal scanning period during the scan lines of the polarity reversal, Applicants submit that one of ordinary skill in the art would not agree that the technique described in this CONSTITUTION is not reasonably based on the invalid signal portion, as clearly described in final claim limitation. Indeed, the technique in Soiche relies upon changing the horizontal scanning period, an entirely different concept.

Hence, turning to the clear language of the claims, in Soiche there is no teaching or suggestion of: "... wherein said scan line drive circuit and said data line drive circuit, in the scan lines where the polarity of said write signal is inverted, supply said drive signal and said write signal for a period of time that is longer than one horizontal period by a fixed amount of time that is determined within a range of an invalid period, during which said invalid period said image data is not supplied ...", as required by independent claim 5.

Additionally, dependent claims 6-10 and claim set 11-17 are not taught or suggested by the cited references.

Therefore, there are elements described in the independent claim that are not present in Soiche, and the Examiner is respectfully requested to withdraw this rejection.

III. FORMAL MATTERS AND CONCLUSION

In view of the foregoing, Applicant submits that claims 5-17, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Serial No. 10/762,501
Docket No. OSP-15515

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,



Date: _____

12/23/04

Frederick E. Cooperrider
Registration No. 36,769

McGinn & Gibb, PLLC
8321 Old Courthouse Road, Suite 200
Vienna, VA 22182-3817
(703) 761-4100
Customer No. 21254